

Notice of Allowability

Application No.

10/759,276

Examiner

Ly T TRAN

Applicant(s)

SUZUKI, KAZUNAGA

Art Unit

2853

aw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

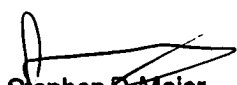
1. ☒ This communication is responsive to 1/20/04.
2. ☒ The allowed claim(s) is/are 18-30.
3. ☒ The drawings filed on 20 January 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1/20/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


Stephen D. Meier
Primary Examiner

DETAILED ACTION

Prior Art cited

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Hosono (EP 1 106360) discloses some measures to prevent the viscosity of the ink in the nozzles are to jet out ink having an increased viscosity from the nozzle outside the recording area (flushing operation) and another one is to cause the meniscus of the ink to minutely vibrate to stir the ink (Page 2: [0005]). However, Hosono does not teach the claimed invention.
 - Ishiyama et al (USPN 6,685,300) discloses small vibration, which do not cause the ink to discharge (abstract) and refresh operation step (Column 5: line 1-6). However, Ishiyama does not teach the claimed invention.
 - Aruga et al (USPN 6,024,432) discloses different cleaning mode (Column 2: line 5-16). However, Aruga does not teach the claimed invention.
 - Kobayashi et al (USPN 6,036,299) discloses small vibration and flushing operation (Fig.2: element 24, 30). However, Kobayashi et al does not teach the claimed invention.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:
 - The primary reason for the allowance of claims 18-30 is the inclusion of an ink jet recording apparatus comprising a controller, which drive the

pressure generator such that a plurality of first operations and a plurality of second operation are alternately repeated in one flushing operation wherein each of the first operation includes a plurality of repetitive drivings of the pressure generator each of which is performed such that a meniscus of ink is vibrated to an extend that an ink droplet is not ejected and each of the second operations includes a plurality of repetitive ink ejections. It is limitation found in each claims, as it is claimed in the combination that has not been found, taught, or suggested by the prior art of record, which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

May 7, 2004



Stephen D. Meier
Primary Examiner